

## Patent Abstracts of Japan

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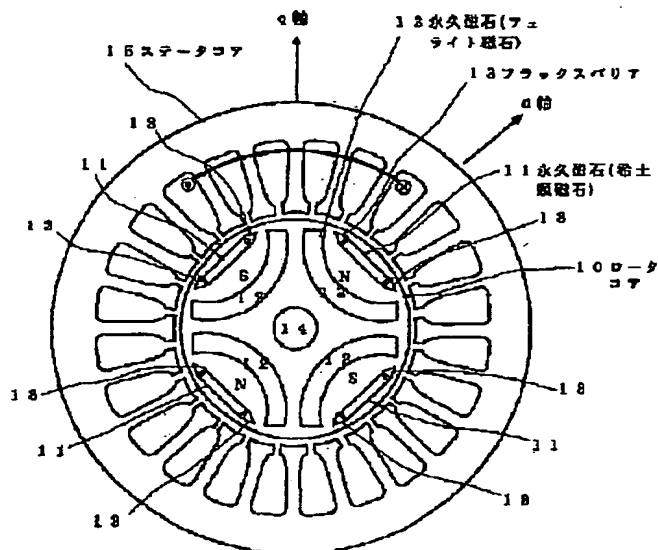
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TITLE : PERMANENT MAGNET MOTOR



**ABSTRACT :** PROBLEM TO BE SOLVED: To obtain an adaptive motor by increasing the selection width of reluctance torque and magnetic flux density, and enabling cost reduction.

**SOLUTION:** When permanent magnets are adjusted to the number of poles and embedded in a rotor core, in an inner rotor type permanent magnet motor, two permanent magnets 11, 12 are embedded in each magnetic pole. One permanent magnet 11 is constituted of a rare-earth magnet, has a rectangular section (planar type), and is arranged in the circumferential direction, along the core outer form. The other permanent magnet 12 is constituted of a ferrite magnet, has an arc-type section, and the protruding part is made to face the core inner diameter. The magnets 12 are arranged in the circumferential direction. That is, the two permanent magnets 11, 12 form a quasi-double layer, and the permanent magnet 12 surrounds the permanent magnet 11.

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